REMARKS

In the Office Action, the Examiner rejected claims 1-30. No claims are amended. By this Response, claims 1-30 remain pending in the present application and are believed to be in condition for allowance. In view of the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Amendments to the Drawings

As discussed above, the submitted replacement drawing sheet is provided to replace the original drawing sheet labeled "1/10." In particular, reference label 18 of Fig. 1 has been amended to refer to a "Testing Window" rather than a "Training Window." Applicants apologize for this minor error. Moreover, Applicants respectfully submit that this replacement sheet does not add any new matter and is fully supported by the specification. *See e.g.,* Application, paragraph 28 (disclosing that data stream 12 is partitioned into a *training window* 16 and a *testing window* 18).

Amendments to the Specification

Applicants have amended certain paragraphs of the specification to cure minor typographical errors. Applicants respectfully submit that these amendments were not made for reasons related to patentability and that no new subject matter has been added. Accordingly, Applicants respectfully request entry of the amendments to the specification, provided herein.

Claim Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-12, 14-23, 25-30 under 35 U.S.C. § 102(b) as being anticipated by Wilks et al., U.S. Patent No. 6,107,919 (hereinafter referred to as "the Wilks reference"). Specifically, with regard to independent claims 1, 15, 22, 25, and 27, the Examiner stated:

> With regards to Claim 1, 12, 15, 17, 22, 25, and 27 Wilks teaches a processor-based method comprising:
>
> receiving a data stream comprising a plurality of temporally ordered data points (Figure 1A, B, Abstract, Column 7, Lines 17-Column 8, Line 15);
>
> generating a plurality of sequences from a first portion of the data stream (Figure 1A, B, Abstract, Column 7, Lines 17-Column 8, Line 15); and
>
> training a detector by determining a value for a sensitivity parameter using the plurality of sequences (Figure 1A, B, Abstract, Column 7, Lines 17-Column 8, Line 15).

Office Action, page 2.

Applicants respectfully traverse this rejection. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). That is, the prior art reference must show the *identical invention "in as complete detail as contained in the ... claim"* to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d

1913, 1920 (Fed. Cir. 1989). (Emphasis added). Thus, for anticipation, the cited reference must not only disclose all of the recited features but must also disclose the *part-to-part relationships* between these features. *See Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 486 (Fed. Cir.1984). Accordingly, Applicants need only point to a single element or claimed relationship not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Brief Summary of Embodiments of the Invention

Applicants note that the present application is generally directed to a data monitoring system that may be employed to monitor various types of measured data. *See* Application, paragraph 20. The data monitoring system 10 may monitor a data stream 12 from any one of a number of data producing systems such as computer-related systems, disk drives, web servers, call centers, traffic systems, car engines, patients, stock market, or citation indices, for example. *See id.* The data stream 12 may generally include a sequence of temporally ordered data values. *See id.* at paragraph 21. In accordance with embodiments of the present invention, the data stream 12 is partitioned into a training window 16 and a testing window 18. *See id.* at paragraph 28. The training window 16 is defined as a contiguous portion of the data stream 12 that is used to train a detector 22 configured to detect something notable or interesting about the data stream 12, such as a change. *See id.* at paragraph 29. The trainer 20 uses the data in the training window 16 to generate a number of sequences 24 and uses the sequences 24 to determine an optimal value for a sensitivity parameter 26 to be used to parameterize the detector 22. *See id.* The sensitivity parameter 26 might be a threshold, for instance, establishing a level that is used

to trigger an alarm 28 if the monitored data reaches the value of the sensitivity parameter 26. *See id.* The value established for the sensitivity parameter 26 is then delivered to the detector 22 such that the detector 22 can use the sensitivity parameter 26 to determine whether the data in the testing window 18 exhibits the type of behavior that the detector 22 should detect. *See id.* at paragraph 30. By establishing a value for the sensitivity parameter 26 and setting the detector 22 to detect changes correlative to the sensitivity parameter 26, the detector is "trained." *See id.*

Once trained by determining a value for a sensitivity parameter 26 using the sequences 24 generated from the data training window 16, the detector 22 monitors the data contained within the testing window 18 to determine whether the data in the testing window 18 contains the sort of event or exemplify the sort of property the detector 22 is designed to detect. *See id.* at paragraph 33. As can be appreciated, the detector 22 is configured to detect "something" in the data stream 12. *See id.* at paragraph 34. That is to say, the detector 22 is configured to monitor the data stream 12 to detect something of interest, such as the occurrence or non-occurrence of a notable event or the implication that the data producing system 14 is in a state of interest. *See id.* Most commonly, the detector 22 will be configured to detect that a salient change has occurred in the data stream 12 – either that a salient change occurred within the testing window 18 or that the data contained in the testing window 18 is saliently different from the data contained in the training window 16. *See id.*

In summary, embodiments of the present system are directed to a system configured to receive a data stream. The system includes a trainer which samples a first portion of the data

stream (e.g. in a "training window") to train the system to detect events, such as changes, in a second portion of the data stream (e.g. in a "testing window"). That is, the present system uses a first portion of the data stream to train itself to detect something in a second portion of the data stream.

Accordingly, independent claim 1 recites a method comprising "receiving a data stream comprising a plurality of temporally ordered data points," "generating a plurality of sequences from a first portion of the data stream," and "training a detector by determining a value for a sensitivity parameter using the plurality of sequences." Independent claim 15 recites a method comprising "training a detector using a plurality of sequences generated from a first portion of a data stream, wherein the detector is configured to detect an interesting event in the data stream," and "testing a second portion of the data stream using the trained detector." Independent claim 22 recites a system comprising "a trainer configured to generate a plurality of sequences from a first portion of a data stream and further configured to determine one or more sensitivity parameters based on the sequences," and "a detector configured to detect an interesting event in the data stream using the one or more sensitivity parameters." Independent claim 25 recites a computer-readable medium encoded with computer instructions for "generating a plurality of sequences from a first portion of a data stream," "determining a sensitivity parameter using the plurality of sequences," and "training a detector to detect an interesting event in the data stream using the sensitivity parameter." Independent claim 27 recites a system comprising "means for generating a plurality of sequences from a first portion of a data stream," "means for determining

a sensitivity parameter based on the plurality of sequences," and "means for detecting an interesting event in a second portion of the data stream using the sensitivity parameter."

The Examiner's Instant Rejections Lack Sufficient Explanation or Reasoning

As a preliminary matter, Applicants note that in rejecting independent claims 1, 15, 22, 25, and 27, the Examiner merely quoted the subject matter recited by independent claim 1 and asserted that *each* element recited by independent claim 1 is disclosed by "Figure 1A, B, Abstract, Column 7, Lines 17 – Column 8, Line 15" of the Wilks reference. Office Action, pages 2-3. However, other than citing to these figures and passages, the Examiner has provided absolutely no explanation or reasoning as to where in the cited figures and passages the Examiner believes the recited subject matter is disclosed. Accordingly, Applicants are unable to ascertain and fully appreciate the Examiner's rejections.

Applicants respectfully remind the Examiner of his duties and obligations under 37 C.F.R. § 1.104 and M.P.E.P. § 707.07 to provide actions which are *complete as to all matters*. As noted above, each of the independent claims 1, 15, 22, 25 and 27 recite various features and embodiments of the present invention. Moreover, while certain of the recited features are common to more than one independent claim, other features are not common to each of the claims. Additionally, Applicants note that in the instant Office Action, the Examiner only directed Applicants to certain passages of the Wilks reference as purportedly pertaining to independent claim 1. When a reference is complex or shows or describes inventions other than that claimed by the Applicants, the particular part relied on by the Examiner must be designated

as nearly as practicable and the pertinence of each reference to each independent claim must be clearly explained. *See* 37 C.F.R. § 1.104(2); *see also* M.P.E.P § 707.07. (Emphasis added). As set forth below, Applicants have responded to the Examiner's rejection with specific regard to claim 1. It should be noted, however, that to the extent that certain features of independent claims 15, 22, 25 and 27 are *also* recited in claim 1, Applicants traverse the Examiner's rejection of those claims for reasons set forth below with regard to the rejection of independent claim 1.

Applicants further stress that certain features recited in claim 1 are not recited in independent claims 15, 22, 25 and 27, and that each of independent claims 15, 22, 25 and 27 recite respective features which may not be recited in claim 1 and which may provide further distinguishing features with regard to those respective claims. For instance, in addition to "training a detector," as recited in claim 1, independent claim 15 further recites "testing a second portion of the data stream using the trained detector." Independent claim 22 recites both "a trainer" and "a detector." Independent claim 25 recites a computer-readable medium encoded with computer instructions for generating sequences, determining a sensitivity parameter and training a detector to detect an event. Independent claim 27 recites a system comprising means for performing the steps of claim 25.

Applicants submit that the above-discussed additional elements of independent claims 15, 22, 25 and 27 were not considered by the Examiner in the present rejection. Therefore, if the Examiner chooses to maintain the current rejections in a future communication, Applicants respectfully request that the Examiner provide a more detailed summary of those features of the

recited claims and direct Applicants to the allegedly similar features disclosed in the cited reference with *sufficient specificity* to allow Applicants a fair opportunity to appropriately respond. Notwithstanding this request, Applicants respectfully submit that the Wilks reference does not disclose each of the elements recited in any of the independent claims.

According to the background of the Wilks reference, prior art systems are generally fully automated such that alarm conditions do not provide adequate information about the level of deviation from a desired operation state or target pattern. *See* Wilks, col. 1, lines 30-33. For example, a number of individual processes may drift from an ideal operating state but, nevertheless, still be acceptable for the intended industrial application. *See id.* at col. 1, lines 33-36. Disadvantageously, these "inappropriate" alarms may result in unnecessary shut down of an industrial process and/or require unnecessary servicing and repair of the industrial equipment involved. *See id.* at col. 1, lines 36-39. To address this problem, the Wilks reference provides a pattern recognition system and method for analyzing a source of data. *See id.*, Abstract. The disclosed system and method involves initially training a system using a selected data signal and calculating at least two levels of sensitivity. *See id.* Using this dual-mode sensitivity scheme, alarms associated with either the first or second sensitivity level may be acted upon by an operator and/or analyzed by a specialist or computer program. *See id.* However, this subject matter is in stark contrast to the subject matter disclosed in the present application and recited in the present claims.

As noted above, independent claim 1 recites, *inter alia*, "generating a plurality of sequences from a first portion of the data stream," and "training a detector by determining a value for a sensitivity parameter using the plurality of sequences." As described in the specification of the present application, "training" a detector is defined as setting the detector to detect changes correlative to the determined sensitivity parameter. *See* Application, paragraph 30. Accordingly, to anticipate independent claim 1, the Examiner must show that the Wilks reference discloses, among other features, (1) generating a *plurality of sequences* from a *first portion* of the data stream, (2) determining a sensitivity parameter from the *plurality of sequences*, and (3) setting a detector to detect changes based on the sensitivity parameter. However, Applicants submit that due to the Examiner's lack of any explanation or reasoning in the instant rejections (other than generally citing to several figures and columns of Wilks), such a showing has not been met. Nevertheless, Applicants, by the present Response, have made an earnest attempt to apply the Wilks reference to the pending claims based on Applicants' best understanding of what the Wilks reference discloses in order to respond to the Examiner's current rejections. It should be noted, however, that while Applicants have discussed *possible* part-to-part correlations between the Wilks reference and the presently pending claims in the analysis presented below, Applicants by no means admit or agree to any of these correlations. Rather, Applicants have provided these hypothetical correlations *solely* as a means to respond to the current rejections in view of the Examiner's omissions. Accordingly, these "hypothetical" correlations are to be viewed *only* as what Applicants' believe to be one possible interpretation that the Examiner may have intended to convey. With this in mind, Applicants respectfully submit that the Wilks reference fails to disclose one or more of the aforementioned features of

independent claim 1, as well as features pertaining to other claims, for at least the reasons presented below.

Wilks fails to teach or suggest determining a value for a sensitivity parameter using a plurality of sequences.

With regard to Figure 1 of the Wilks reference, Applicants note that step 10 is labeled as "Train System." *See* Wilks, Fig. 1. Wilks discloses that the training step 10 includes two steps: (1) choosing a source of data (e.g., either archived 16 or online data 14), as indicated by step 12, and (2) determining pattern recognition parameters, as indicated by step 18. *See id.* at col. 3, lines 48-53. The pattern recognition parameters may include two levels of sensitivity, such as a low and a high sensitivity, and may be applied to SPRT modules 22 and 24, respectively, to perform the general function of data monitoring. *See id.* at col. 7, lines 30-36. Based on this description, Applicants believe the Examiner may have intended for the disclosed "pattern recognition parameters" to correspond to the recited "sensitivity parameter," the SPRT modules 22 and 24 to correspond to the recited "detector," and for the application of the low and high sensitivity pattern recognition parameters to the SPRT modules 22 and 24, respectively, to constitute the recited step of "training a detector." However, even assuming, *arguendo*, that this interpretation is proper, Applicants submit that the Wilks reference still fails to disclose all the features of independent claim 1, such as determining values for the recited sensitivity parameter(s) by "generating a plurality of sequences from a first portion of the data stream."

With this in mind, Applicants note that with regard to the disclosed pattern recognition monitoring system, the Wilks reference discusses, in great detail, a Sequential Probability Ratio Test (SPRT) algorithm for use in pattern recognition analysis and monitoring. *See id.* at col. 3, line 54 – col. 5, line 52. In particular, the description of the SPRT algorithm appears to describe calculating a likelihood ratio 1_n by obtaining a product of the *probability* of observed sequences (e.g., $y_1, y_2, y_3 \ldots y_n$). *See id.* at col. 4, lines 42-50 (noting Equation 1). Thus, it appears that in calculating the likelihood ratio 1_n, the SPRT procedure is only concerned with the *probability* that a sequence might occur, and not with the *actual* sequence itself. However, even if $y_1, y_2, y_3 \ldots y_n$ could be considered as "plurality of sequences" in the context of the present claims and the Wilks reference, Applicants note that the Wilks reference is vague and unclear as to whether these "sequences" are used in the calculation of the "pattern recognition parameters" or if these "sequences" are used in the monitoring of data *after* the pattern recognition parameters have already been determined and applied to SPRT modules 22 and 24.

For example, referring now to column 7, lines 17 to 29 of the Wilks reference, Applicants note that this passage explicitly states that step 18 of Fig. 1, which appears to correspond to the recited step of "determining a value for a sensitivity parameter," includes the steps of calculating:

> (1) the stopping thresholds determined from a *user specified* false and missed alarm probabilities,
>
> (2) the sample disturbance magnitude calculated from the *user specified* sensitivity levels for each level of sensitivity,
>
> (3) the variance of each of the monitored data, and

(4) the mean of each of the monitored data.

Id. at col. 7, lines 17-29. (Emphasis and numbering added). Based on the explicitly stated functions of step 18, Applicants do not believe that the disclosed steps of determining the pattern recognition parameters includes using the sequences $y_1, y_2, y_3 \ldots y_n$. In analyzing each of these calculation steps, as discussed below, Applicants submit that none of the steps relating to the calculation of the disclosed pattern recognition parameters appear to be based on a "plurality of sequences."

As noted above, the Wilks reference discloses that the calculation of pattern recognition parameters includes calculating "stopping thresholds" which are determined from user specified false and missed alarm probability values. Applicants note that these user specified probability values are designated by the variables α (false alarm probability) and β (missed alarm probability), and that the calculation of the stopping thresholds is determined by the following equations:

$$A = \frac{\beta}{1-\alpha} \quad \text{, and} \quad B = \frac{1-\beta}{\alpha}$$

Id. at col. 4, line 65 – col. 5, line 10. However, Applicants note that nothing in these equations for calculating the "stopping thresholds" appears to be based on the above discussed likelihood ratio 1_n which, as discussed above, may take into account a plurality of sequences $y_1, y_2, y_3 \ldots y_n$.

The Wilks reference also discloses that the calculation of pattern recognition parameters includes calculating a sample disturbance magnitude from *user specified* sensitivity levels for each level of sensitivity. Applicants note that it is unclear from the disclosure of the Wilks reference as to how the sample disturbance magnitudes are calculated from the user specified sensitivity levels. Rather, Wilks simply describes the sample disturbance magnitudes as "a mean +M or –M, where M is a *pre-assigned* system-disturbance magnitude." *Id.* at col. 4, lines 29-30. Further, referring to the "Summary of the Invention," it appears that one set of sample disturbance magnitudes, designated as M_1+ and M_1-, corresponds to the low sensitivity pattern recognition parameters, while a second set of sample disturbance magnitudes, designated as M_2+ and M_2-, corresponds to the high sensitivity pattern recognition parameters. *See id.* at col. 2, lines 5-41. Again, Applicants note that nothing in the Wilks reference appears to disclose that calculating the "sample disturbance magnitudes" appears to be based in any part on above discussed likelihood ratio 1_n or the plurality of sequences $y_1, y_2, y_3 \ldots y_n$.

The Wilks reference further discloses that the calculation of pattern recognition parameters includes calculating a mean and variance from each of the monitored data. Applicants submit that it is unclear from the Wilks reference as to what data "each of the monitored data" is referring. However, upon further review, Applicants believe that "each" is simply meant to refer to either the archived data 16 or the online data 14, one of which may be selected at step 12 of the training block 10. However, Applicants submit that nothing in the Wilks reference suggests that calculating the mean (M) or the variance (σ^2) is based in any part on the above discussed likelihood ratio 1_n or the plurality of sequences $y_1, y_2, y_3 \ldots y_n$.

Therefore, in view of the foregoing analysis, Applicants submit that the determination of the pattern recognition parameters, as disclosed by step 18 of the Wilks reference, does not appear to be based in any part on a "plurality of sequences," as would be required to anticipate independent claim 1. Moreover, due to the complexity of the cited reference and the Examiner's failure to provide any explanation in the instant rejection, Applicants have further analyzed the Wilks reference under the hypothetical assumption that one *could* somehow interpret that the "plurality of sequences" (e.g., $y_1, y_2, y_3 \ldots y_n$) is used in calculating the pattern recognition parameters at step 18 of Fig. 1. However, even under this hypothetical analysis, Applicants submit that further deficiencies exist with regard to the Wilks reference, as will be discussed below.

Even if it could be interpreted that Wilks teaches determining pattern recognition parameters using a plurality of sequences, Wilks fails to disclose that the "plurality of sequences" are generated from a first portion of a data stream

As discussed above, Applicants do not believe that Wilks discloses determining values for pattern recognition parameters (e.g., sensitivity parameters), which are based on a *plurality of sequences*. However, assuming, *arguendo*, that the functions $y_1, y_2, y_3 \ldots y_n$ *could* be considered sequences, and that these sequences *are* somehow used in the calculation of pattern recognition parameters in step 18 of Fig. 1, Applicants further submit that the Wilks reference further fails to teach or suggest that the "plurality of sequences" are generated from a first portion of a data stream.

Referring to Fig. 3 of the present application, Applicants note that each of the plurality of sequences (e.g., SEQ.1, SEQ.2, SEQ.3…) generated by the claimed method is derived from a fixed training window 16. *See* Application, Fig. 3. The training window 16 is defined as "a contiguous portion of the data stream 12 that is used to train a detector 22." *Id.* at paragraph 29. With reference now to Fig. 1, Applicants note that the training window comprises a fixed set of *temporally ordered* data (e.g., data taken from time 1:35 to 2:20, in increments of 0:05). *See id.* Fig. 1. In other words, each of the plurality of sequences is generated from the *same* sample of data (e.g., training window 16), which corresponds to a fixed *first portion* of a data stream 12.

In sharp contrast, the Wilks reference appears to disclose that each "sequence" y_1, y_2, y_3 . . . y_n is generated from respective *different* sets of data. For example, with regard to the disclosed y-functions (e.g., sequences), the Wilks reference discloses that y(t) is a function of differencing the digitized signals from two respective sensors. *See id.* at col. 4, lines 11-15. In particular, y_k is obtained by taking a sample of a process at time t_k. *See id.* Therefore, sequence y_1 is obtained from a sample of the data at time t_1, sequence y_2 is obtained from a sample of the data at time t_2, sequence y_3 is obtained from a sample of the data at time t_3, and so forth. In other words, even assuming that y_1, y_2, y_3 . . . y_n could correspond to the recited "plurality of sequences," each sequence is generated from *different sets of data* sampled from *different* points in time. As such, Applicants submit that the sequences y_1, y_2, y_3 . . . y_n are clearly not generated from a *first portion of a data stream*, as recited by independent claim 1. Accordingly, Applicants submit that the

Wilks reference fails to disclose at least the above discussed features with regard to independent claim 1.

Wilks does not teach "testing a second portion of the data stream using the trained detector," as further recited in claim 15

Further, with regard to independent claim 15, Applicants submit that there is nothing in the Wilks reference that can be reasonably correlated with "testing a second portion of the data stream using the trained detector." As discussed above, the Examiner made no specific comments regarding the features uniquely recited in any of the independent claims other than those common to independent claim 1. Because independent claim 15 recites "testing a second portion," and at least this unique feature was not discussed above with regard to independent claim 1, Applicants respectfully assert that this feature is also missing from the teachings of Wilks. In particular, Applicants note that the data used to calculate the disclosed pattern recognition parameters in the alleged "training step" of Fig. 1, step 18 of the Wilks reference appears to be the *same* data used in further monitoring (e.g., testing) the data by the SPRT modules 22 and 24. *See* Wilks, Fig. 1. Indeed, Wilks clearly states that "[a]fter the training step 10 is completed, the methodology continues by monitoring the data (either the archived data or the online monitored data) *which is fed into two (or more) separate SPRT modules 22 and 24*." *Id.* at col. 7, lines 30-34. Thus, in view of the plain teachings of the Wilks reference, Applicants submit that Wilks does not appear to make any distinction that a data stream is divided into a first portion used for training, and a second portion used for testing. Rather, it appears that the

same data used in the training step 10 is also used in detection steps performed by the SPRT modules 22 and 24.

Therefore, because the Wilks reference does not disclose at least the above discussed features, Applicants submit that the Wilks reference cannot possibly anticipate the subject matter recited in independent claims 1 or 15, or those claims dependent thereon. Further, for at least the reasons discussed above, Applicants submit that the Wilks reference cannot possibly anticipate the similar subject matter recited in independent claims 22, 25 and 27, or those claims dependent thereon. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejections under 35 U.S.C. § 102 in view of the Wilks reference, and allowance of claims 1-12, 14-23, 25-30.

Claim Rejections Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 13 and 24 under 35 U.S.C. § 103(a) as being unpatentable over the Wilks reference in view of Cox et al., U.S. Patent No. 5,734,592 (hereinafter referred to as "the Cox reference"). Applicants respectfully traverse these rejections.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed

elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). In establishing a *prima facie* case for obviousness, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 at 1729 (2007).

Deficiencies of the Rejection

Applicants respectfully assert that the Examiner has not established a *prima facie* case of obviousness with regard to claims 13 and 24, which depend from claims 1 and 22, respectively. As stated above, the Examiner rejected claims 13 and 24 as obvious over the Wilks reference in view of the Cox reference. However, as described above, the Wilks reference clearly does not disclose those claim features attributed to it by the Examiner. Moreover, Applicants note that the Examiner relied on the Cox reference solely for the teaching that cost variables may be used in determining sensitivity parameters. *See* Office Action, page 5. However, such reliance fails to obviate the deficiencies of the Wilks reference.

Therefore, in view of this deficiency, the Examiner's Section 103 rejections of claims 13 and 24, which are based upon the Examiner's mistaken interpretation of the Wilks reference, cannot establish a *prima facie* case of obviousness. As such, Applicants believe claims 13 and

24 are clearly allowable at least by virtue of their dependency from independent claims 1 and 22, respectively. Accordingly, Applicants respectfully request withdrawal of the Section 103 rejections of claims 13 and 24.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: March 13, 2008

/Robert A. Manware/
Robert A. Manware
Reg. No. 48,758
(281) 970-4545

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Department, M/S 35
P.O. Box 272400
Fort Collins, Colorado 80527-2400